## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization International Bureau



# 

### (43) International Publication Date 3 March 2005 (03.03.2005)

### (10) International Publication Number WO 2005/019828 A1

(51) International Patent Classification7: 33/53, 33/569

G01N 33/68,

(74) Agent: BERESKIN & PARR; 40 King Street West, Suite 4000, Toronto, Ontario M5H 3Y2 (CA).

(21) International Application Number:

PCT/CA2004/001503

(22) International Filing Date: 20 August 2004 (20.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/496,381

2,437,675

60/497,362

20 August 2003 (20.08.2003) US 20 August 2003 (20.08.2003) C٨ 21 August 2003 (21.08.2003) US

21 August 2003 (21.08.2003) CA

- 2,437,999 (71) Applicants and
- (72) Inventors: CASHMAN, Neil [CA/CA]; 41 Lawrence Avenue West, Toronto, Ontario M5M 1A3 (CA). LEHTO, Marty [CA/CA]; 545 Woodland Avenue, Burlington, Ontario L7R 2S3 (CA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN. CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FL GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
  - MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG. PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

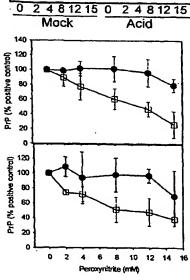
(54) Title: EPITOPE PROTECTION ASSAY AND METIIOD FOR DETECTING PROTEIN CONFORMATIONS

Α В 2 4 8 12 15 0 2 4 8 12 15 Mock Acid 140 120

ONOO mM

(57) Abstract: The invention relates to an epitope protection assay for use in diagnosis, prognosis and therapeutic intervention in diseases, for example, involving polypeptide aggregation, such as prion infections. The methods of the invention first block accessible polypeptide target epitope with a blocking agent. After denaturation of the polypeptide, a detecting agent is used to detect protein with target epitope that was inaccessible during contact with the blocking agent.





## WO 2005/019828 A1

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.